UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

http://www.blm.gov/

March 15, 2007

In Reply Refer To:
1268, 1292, 9216 (WO-560D) P

EMS TRANSMISSION 03/16/2007
Instruction Memorandum No. 2007-081
Expires: 09/30/2008

To: All State and Center Directors
                Attn: Chief Information Officers (CIO) and Field Management Officers (FMO)

From: Assistant Director, Information Resources Management

Subject: Radio Configuration Standards for 2007 Field Season

Program Area: Telecommunications and Wildland Fire

Purpose: This Instruction Memorandum publishes the radio user device configurations
standards for 2007, as endorsed by the Fire National Equipment Committee, the Fire National
Operations Committee, and an Interagency Radio Technical Advisory Group.

Policy/Action: By May 1, 2007, each State and Center shall have all non-Law Enforcement
radios configured per the attached standards. These standards will remain in effect until October
1, 2007.

The attached standards provide the required and recommended software, firmware, and button
and programming configurations for handheld and mobile radios used within Bureau of Land
Management (BLM). Any configuration options not listed in the attachment may be set locally
to best suite the need.

All BLM radios and systems using frequencies from 162 to 174 MHz or 406 to 420 MHz shall
operate in the narrowband. The BLM radio systems supporting wildland fire operations must
use the analog mode. The use of the digital mode is at the discretion of the State or Center for
any other business activity.

Radio systems where a Tone Pick List is used shall have the tone list configured per the
attachment.

Waivers from this policy shall be addressed to the Bureau Radio Manager. The waivers must contain the model of the equipment, the justification why the configuration cannot be implemented, and the configuration which is requested to be used in the radios.

Extensions for the configuration completion due date shall be addressed to the Bureau Radio Manager. It must contain the models of the equipment, the justification why the configuration date cannot be met, and the proposed completion date.

Time Frame: This policy is effective upon receipt.

Background: The 2004 post-fire season comments indicated the need for national radio configuration standards to improve firefighter safety and to make communications support more efficient and effective. As a result, configuration board meetings have been held in 2004, 2005, and 2006 to define these radio configurations standards and further improve the safety for all employees. These boards consisted of fire, resource and law enforcement radio users, and technicians from BLM and the United States Forest Service (USFS). These recommended standards were also submitted to the Fire National Equipment and Operations Committees for review and endorsement.

Budget Impact: Minimal. Pre-field season radio maintenance and configuration is normally conducted each year during the off season.

Manual/Handbooks Affected: None.

Coordination: This document was coordinated with the Office of Fire and Aviation, NIFC Incident Communications Division, State Radio Leads, and USFS.

Contact: Please address any questions or concerns regarding this policy to Jeffery Brown at (202) 452-5008 or Russ Sveda at (303) 236-2315.

Signed by:	Authenticated by:
Scott E. MacPherson	Robert M. Williams
Acting, Assistant Director	Division of IRM Governance,WO-560
Information Resources Management	

1 Attachment
      1 - Bureau of Land Management Radio Configuration Standards 2007 (7 pp)

Bureau of Land Management
Radio Configuration Standards
2007

Thales Handheld Radio Models 501/3/4/5/6

Button Configuration *(Required)***:**

Toggle Switch Position A	Scan ON/Priority ON
Toggle Switch Position B	Scan ON
Toggle Switch Position C	Scan OFF
Emergency (Red)	Optional (may only be used for emergency signaling)
Function Key F1	Monitor
Function Key F2	Optional (Disabled or Zone Select)
Function Key F3	Hi/Low Power

503/5/6 Firmware Version *(Required)***:** 8.2
501 Firmware Version *(Required)***:** 5.12

501/3/4/5/6 Fire Features Option: Required for Fire Radios

Programming Software Version *(Required)***:** 5.0

Radio Software Configuration *(Recommended)***:**

Squelch setting:	02 (II)
Scan Delay setting:	2 seconds
Scan Reply setting:	3 seconds
Monitor Timer setting:	20 seconds
Priority Interval Timer setting:	1.5 seconds
Squelch Revert Mode setting:	Last selected
Transmit Timeout setting:	90 seconds

Accessory Configurations *(Required)***:**

Battery Charger Firmware Version: 2.10E

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Radio Configuration Standards
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EF Johnson Handheld Radio Model 5100

Button Configuration *(Required)***:**

Switch position A	Scan Off
Switch position B	Scan On
Switch position C	Scan On
Emergency (Orange)	Optional (may only be used for emergency signaling)
Left side Auxiliary 1	Disabled
Left side Auxiliary 2	Keypad Lockout
Left side Auxiliary 3	Hi/Low Power
Front of radio F1	Fixed (Exit Program Functions)
Front of radio F2	Fixed (Menu and Add/Delete Scan)
Front of radio F3	Scan List Select
Front of radio F4	Display
* Key	Optional (disabled or any function)
# Key	Optional (disabled or any function)

Non-SEM Flash Version *(Required)***:**	1.18.15
Non-SEM Boot Version *(Required)***:**	1.13.0
SEM Flash Version *(Required)***:**	2.8.15
SEM Boot Version *(Required)***:**	2.4.0
UCM Flash Version *(Required)***:**	3.8.14
UCM Boot Version *(Required)***:**	3.4.0
X Flash Version *(Required)***:**	4.4.27
X Boot Version *(Required)***:**	4.2.0

Finding the version number - Turn on the radio and check the displayed version number at power up (after the logo).

Non-SEM = V 1.x.x   SEM = V 2.x.x   UCM = V 3.x.x   X = V 4.x.x

Radio Programming Software All Models *(Required)***:**   1.28.0.9
Radio PC Tune Software All Models *(Required)***:**   2.0.2.3

Radio Software Configuration *(Recommended)***:**   Squelch setting - 0

Soft Key Programming functions *(Required minimum)***:**

Keypad Programming   Cloning   Scan Edit

Accessory Configurations: NA

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Relm/BK Handheld Radio Models

Button Configuration *(Required)***:**

Left toggle	Low Power
Center toggle	Channel Scan
Right toggle	Priority Scan

DPHx Option Board Version *(Required)***:**	31688543
DPHx System Board Version *(Required)***:**	30FB1F53
DPH Option Board Version *(Required)***:**	30428112
DPH System Board Version *(Required)***:**	2F2383C1
DPH Expanded Frequency Operations:	Required
GPH Flash Firmware Version *(Required)***:**	2F145109
EPH Firmware Version:	NA

Finding the version number - Turn on the radio and then press and hold the "0" key to see the Option Board version number. Press and hold the "1" key to see the System Board version number.

DPH Radio Programming Software *(Required)***:**	3.3.1
GPH Radio Programming Software *(Required)***:**	2.5.0
EPH Radio Programming Software *(Required)***:**	1.1.6

Radio Software Configuration: NA

Accessory Configurations: NA

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Datron Guardian Handheld Radio Models

Button Configuration *(Required)*:

Toggle Switch Position A	Scan ON/Priority ON
Toggle Switch Position B	Scan ON
Toggle Switch Position C	Scan OFF
Emergency (Orange)	Optional (may only be used for emergency signaling)
Function Key F1	Monitor
Function Key F2	Optional (disabled or Zone Select)
Function Key F3	Hi/Low Power

Firmware Version *(Required)*:   7.3

Radio Programming Software *(Required)*:   3.2.2.40

Radio Software Configuration *(Recommended)*:

Squelch setting:	02 (II)
Scan Delay setting:	2 seconds
Scan Reply setting:	3 seconds
Monitor Timer setting:	20 seconds
Priority Interval Timer setting:	1.5 seconds
Squelch Revert Mode setting:	Last selected
Transmit Timeout setting:	90 seconds

Accessory Configurations: NA

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EF Johnson Mobile Radio Model 5300

Button Configuration *(Recommended)***:**

Dash Mount

Function Key F1 (Red)	Optional (may only be used for emergency signaling)
Function Key F2	Keypad Programming
Function Key F3	Monitor
Function Key F4	Display
Function Key F5	Scan Edit
Function Key F6	Scan On/Off

Handheld Control Unit

Emergency	Optional (may only be used for emergency signaling)
Clear/Secure	Encryption Enabled/Disabled
Function Key F1	Keypad Programming
Function Key F2	Monitor
Function Key F3	Display
Function Key F4	Scan Edit
Function Key F5	Scan On/Off
* Key	Optional (disabled or any function)
# Key	Optional (disabled or any function)

HC08 Flash Version *(Required)***:**	NA
HC08 Boot Version *(Required)***:**	NA
ARM Flash Version *(Required)***:**	1.32.5
ARM DSP Version *(Required)***:**	1.64
ARM 816 Boot Version *(Required)***:**	1.10
ARM 416 Boot Version *(Required)***:**	1.11
5300X PPC Version *(Required)***:**	4.6.6
5300X Boot Version *(Required)***:**	4.0

HC08 Programming Software *(Required)***:**	1.22.0.4
ARM Programming Software *(Required)***:**	1.28.0.08
HC08 PC Tune Software *(Required)***:**	2.8.0
ARM PC Tune Software *(Required)***:**	2.0.2.3

Radio Software Configuration *(Recommended)***:** Squelch setting - 0

Soft Key Programming functions *(Required minimum)***:** NA

Accessory Configurations: NA

Bureau of Land Management
Radio Configuration Standards
2007

Relm/BK Mobile Radio Model DMH

Button Configuration *(Recommended)***:**

Dash Mount

MON	Monitor
SCN	Channel Scan
PRI	Priority Scan
GRP	Group/Zone Select
___	Optional (disabled or any function)

Remote Control Head

MON	Monitor
SCN	Channel Scan
PRI	Priority Scan
GRP	Group/Zone Select
___	Optional (disabled or any function)

DMH Radio Programming Software *(Required)***:**   1.0.0

Radio Software Configuration: NA

Accessory Configurations: NA

Bureau of Land Management
Radio Configuration Standards
2007

Radio Tone Pick List

RS-220-A EIA Standard CTCSS Tones

Tone #	Tone
1	110.9 Hz
2	123.0 Hz
3	131.8 Hz
4	136.5 Hz
5	146.2 Hz
6	156.7 Hz
7	167.9 Hz
8	103.5 Hz
9	100.0 Hz
10	107.2 Hz
11	114.8 Hz
12	127.3 Hz
13	141.3 Hz
14	151.4 Hz
15	162.2 Hz
16	192.8 Hz